ANNEX

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	**)**	
	)	
Digital Broadcast Content Protection	**)**	**MB Docket No. 02-230**
	)	

COMMENTS OF THE MOTION PICTURE ASSOCIATION OF AMERICA, INC., METRO-GOLDWYN-MAYER STUDIOS INC., PARAMOUNT PICTURES CORPORATION, SONY PICTURES ENTERTAINMENT INC., TWENTIETH CENTURY FOX FILM CORPORATION, UNIVERSAL CITY STUDIOS LLLP, AND THE WALT DISNEY COMPANY

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TABLE OF CONTENTS

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The Motion Picture Association of America, Inc. ("MPAA"), Metro-Goldwyn-Mayer Studios Inc., Paramount Pictures Corporation, Sony Pictures Entertainment Inc., Twentieth Century Fox Film Corporation, Universal City Studios LLLP, and the Walt Disney Company hereby submits these Comments in response to the Commission's Further Notice of Proposed Rulemaking.[1]

INTRODUCTION

On November 4, 2003, the Commission adopted compliance and robustness rules requiring protection of Marked digital broadcast content in DTV demodulation devices and some peripheral transport-stream-processing products. Although the regulation cannot be in place for

[1] *See* Report and Order and Further Notice of Proposed Rulemaking, *Digital Broadcast Content Protection*, M.B. Docket No. 02-230, FCC 03-273 (rel. Nov. 4, 2003) ("Broadcast Flag Order").

the 2004 manufacturing season,[2] the Commission's decision paves the way for a digital transition in which broadcast's role is assured.

I. The Commission Should Adopt Market-Based Standards and Procedures for Authorizing New Output Protection Technologies and Recording Methods

The Commission has requested comments in both the Broadcast Flag and the Plug & Play proceedings on "whether standards and procedures should be adopted for the approval of new content protection and recording technologies to be used with device outputs" on compliant products, and if so, what "types of content protection technologies that should be considered as a part of this process." In substance, the answer to the standards questions in both proceedings should be the same. The same substantive considerations for ensuring the security and timeliness of new authorized outputs for Broadcast Flag-compliant devices apply in the Plug & Play context as well.[3] Indeed, the list of Authorized Digital Output Protection Technologies and Authorized Recording Methods in the Broadcast Flag regulation ("Table A") is designed to "piggy-back" on technologies approved by content owners for use in other venues. The entire basis of the proposal put forth in the Broadcast Flag proceeding and in the Broadcast Protection Discussion Group by the 5C companies, the MPAA, other content providers, and the Computer

[2] Some manufacturers have promised voluntary compliance with the Flag regulation by July 1, 2004. *See* Letter from David H. Arland, Director, Public & Trade Relations, Thomson Inc., to Marlene Dortch, Secretary, FCC (Oct. 8, 2003); Letter from Angela Lee, Manager, Government & Industry Relations, Mitsubishi Digital Electronics America, Inc. to Michael K. Powell, Chairman, FCC (Oct. 30, 2003); Letter from John I. Taylor, Corporate Vice President, Zenith Electronics Corp. to Michael K. Powell, Chairman, FCC (Oct. 30, 2003). The MPAA welcomes those promises and hopes and expects that other manufacturers will step forward now that the regulation has been adopted.

[3] By proposing a unified set of standards for authorized technologies in both proceedings, we do *not* seek to import the numerical copy controls sometimes applicable to conditional access content into the broadcast television realm. Redistribution control, rather than numerical copy limitations, will remain the focus of the Broadcast Flag regulation. As we note in our comments to the Further Notice of Proposed Rulemaking in the Plug & Play proceeding, numerical copy control functionality and licensing terms will be required in authorized technologies for digital outputs and recordings of *non*-broadcast content from unidirectional cable products.

Industry Group (the "Joint Proposal"), is that output and recording technologies voluntarily approved for the protection of high-value DTV content distributed by cable and other channels are sufficient to protect broadcast DTV content.

Moreover, if the standards and procedures we propose in our separate Plug & Play comments are adopted for protection of non-broadcast content in Unidirectional Cable Products, we are prepared to support a regulation in this proceeding that would accord Table A authorization to any protection technology that is approved under the DFAST initial determination and review process.

Therefore, to the extent possible, a single set of criteria for authorizing content protection technologies should be adopted in both proceedings. As the 5C companies, the MPAA, and other content providers stated in comments filed earlier in the Broadcast Flag proceeding, the Commission should adopt standards and procedures that implement "a flexible, market-based approach under which a technology is authorized for Table A if it has been accepted in the relevant marketplace as a protection technology or it is just as effective as one that has." Joint Initial Comments of the MPAA *et al.* at 22; *see also* Comments of the Digital Transmission Licensing Administrator LLC ("5C") at 10. Under the Joint Proposal, any type of output technology, including technologies mapped to wireless signals and Digital Rights Management technologies, that prevents unauthorized redistribution, would be able to qualify for Table A. The MPAA welcomes and encourages manufacturers to come forward with new and innovative content protection technologies that meet the criteria put forward in the Joint Proposal and attached in revised form to these Comments as Appendix A.

As the MPAA has noted in the past, it is incredibly difficult to specify in advance all of the requirements that protection technologies must meet to provide a minimum level of

protection, while leaving the requirements general enough to accommodate different types of protection, both now and in the future. *See* Joint Reply Comments of the MPAA et al. at 18-19. While it is of course possible to state a vague "wish list" of possible features, such a list fails to give the Commission the concrete guidance necessary to allow it to decide in particular instances whether a given technology belongs on Table A or not. It was the near-impossibility of providing such specific guidance that led the MPAA and other industries in the BPDG to propose market-based criteria for Table A, supplemented by a simple benchmark test to be administered by the Commission. The Microsoft and HP proposal for "objective criteria," cited in the Further Notice of Proposed Rulemaking, only serves to illustrate how difficult it is to devise a set of requirements that will both ensure that content is secure, yet does not "lock-in" protection technologies to a particular form of technology or to the particular standards we can envision today.

While the HP-Microsoft proposal refers to itself as providing "functional requirements," it provides little guidance to the Commission or to manufacturers as to the threshold of protection that must be met. For example, the proposal states that "content protection methods should not create consumer confusion;" that "[a] content protection method should protect copyrighted information when it is transmitted among a variety of consumer devices;" that "[i]t should be relatively simple to implement the encryption algorithm;" that "[i]t must be possible to implement the authentication method;" that "[a]ny content protection method should be interoperable with other such methods;" that "[i]t should be technologically possible to upgrade the system in a relatively easy manner;" that "[i]t should be possible to revoke the ability of a device to receive protected content if the device is compromised;" and that "[t]he implementation of a content protection method should not compromise the performance of the

affected devices." These subjective assertions do nothing to specify what technologies will qualify for Table A. For example, they do not answer the question of whether or not to authorize technologies which work only in connection with a particular device, are not interoperable with other Table A technologies, or are not relatively easy to upgrade.

However, the most glaring problem with the HP-Microsoft proposal is that it is incomplete. While the proposal addresses (in cursory fashion) the security that a Table A technology must provide to content as it is traveling over an output, nothing in the HP-Microsoft proposal – not a single paragraph – limits the reach of such outputs, or the extent of redistribution that a Table A technology qualifying under such criteria would permit. The HP-Microsoft proposal would allow onto Table A a technology that permits entirely indiscriminate redistribution. *That is, if encryption and authentication were added to a peer-to-peer file sharing utility, the HP-Microsoft proposal would allow it onto Table A.* Nothing about the proposal constrains Table A outputs, or outputs from Table A recordings, to a certain geographic location, or binds them to a certain person or persons, or limits their reach in any way. Obviously, such a proposal will not guarantee a level of protection for broadcast television equivalent to other, secure forms of distribution, which is the very point of the regulation.

The HP-Microsoft proposal thus does not sufficiently define the minimum levels of protection that must be afforded to content to qualify for Table A. The proposal states that the encryption method, for example, "should be difficult for consumers [to circumvent] using common means." However, most consumers are not cryptographers. Without providing some sort of objectively measurable baseline, the HP-Microsoft proposal could be interpreted to allow ridiculously weak forms of encryption. The proposal provides no guidance as to how, and how

securely, devices must be authenticated. The proposal does not appear to rule out even a one-bit authentication message.

If Table A is allowed to be populated with weak protection technologies that do nothing to protect digital broadcast television, the entire purpose of the Broadcast Flag regulation – which is to prevent the migration of high-value content to more secure distribution channels – will be undermined. The Commission must ensure that Table A is populated not only with a wide variety of protection technologies, but a wide variety of secure protection technologies. The HP-Microsoft proposal, and others like it,[4] fail to achieve that goal. Moreover, they will in all likelihood result in an authorization process that may become mired in procedural and substantive challenges, leading to a stagnant Table A with an insufficient population of technologies. No one desires and benefits from healthy competition among secure Table A technologies more than content providers.

We have added to Appendix A a provision that would prevent a technology from being authorized unless disclosure is made as to whether "use or triggering of the technology imposes any obligations upon a content owner's or broadcaster's use of an unencrypted over-the-air broadcast television signal," and in the event of such obligations, the technology "may be turned off, bypassed, or otherwise not used and triggered at the content owner's and broadcaster's election and content owners and broadcasters are provided with facile means of such election." *See* Appendix A § X.21(c)(9).[5] This provision prevents a holder of patents in an authorized

[4] *See also* Comments of Philips Electronics North America Corp. in Broadcast Flag at 15-18; Letter from Mike Godwin, Senior Technology Counsel, Public Knowledge to Marlene H. Dortch, Secretary, FCC (Oct. 29, 2003); Letter from Richard A. Beutel, Director, Government Relations, Dell, Inc., to Marlene H. Dortch, Secretary, FCC (Oct. 24, 2003).

[5] It is anticipated that Section 76.1903 would either be amended consistent with this provision, or appropriate waivers would be issued if such a circumstance came to pass. We submit that, given the possibility of third-party intellectual property claims with respect to a Table A technology, the amended Section 76.1903 should also permit output control in the event that such claims surface after authorization of the technology.

digital output protection or secure recording technology from attempting to impose licensing obligations on content owners or broadcasters without their consent merely because content is transmitted over an output protected with that technology, or merely because encoding in the content invokes such technology.[6] Without the opportunity to prohibit the use of such protected outputs in such circumstances, content owners and broadcasters may potentially be subjected to royalty claims and expensive litigation – possibly from multiple technology owners – that they could not avoid without forgoing protection of all of their content.

II. The Scope of Prohibited Distribution Should Focus on the Local Environment

The scope of prohibited distribution under our proposed criteria will essentially be self-defined by the marketplace criteria. In the case of applications made under such criteria, the Joint Proposal and our Appendix A require that they demonstrate how the output and recording controls "prevent unauthorized redistribution . . . (including redistribution over the Internet)"; and in the case of applications made under the "at least as effective as" criterion, the Joint Proposal and our Appendix A requires that such technologies be so effective "at protecting Unscreened Content and Marked Content against unauthorized redistribution (including unauthorized Internet redistribution)."

We believe that the focus of attention on unauthorized redistribution should be on whether a proposed technology affirmatively and reasonably constrains unauthorized distribution beyond the local environment; and that the language of the final regulations should be amended to make that clear. The "local environment" is the set of compliant, authorized devices within a

[6] As of the date of this filing, the parties filing these Comments are not aware of any such patents or of any such patent claims being made. By raising this argument before the Commission, we of course are not conceding the validity of any future patent claim and are not waiving, and specifically reserve, any arguments that could be raised in the event of any future patent litigation.

tightly defined geographic area around a Covered Product. Mechanisms to define the local environment consist of: A) controls to limit distance from a Covered Product; B) limits on the scope of the network addressable by such Covered Products; and C) affinity-based controls used to approximate association of such set of devices with an individual or household. For example, the local environment of a Covered Product in a home consists of the set of authorized devices within or in the immediate vicinity (e.g., the yard, garage, or driveway) of that home but does not include Covered Products or devices located in a neighbor's home or operated by passers-by. Devices in an individual's car, RV, or boat are considered to be in the local environment of a Covered Product that is in an individual's home when the devices are in the immediate vicinity of that individual's home.

We do not believe that the notion of a "personal digital network environment" is appropriately addressed at this time. To begin with, that term has engendered considerable confusion. To the extent that the ambiguous notion of a "personal digital network environment" may go beyond localization, an attempt to regulate or define this area will inevitably risk substantial and continuing conflict with copyright law definitions of exclusive rights pertaining to performance and distribution, and significantly impair if not render impossible the efforts of copyright owners to protect those rights by technological means. It also will fundamentally impair and interfere with emerging business models designed to enhance consumer choice and consumer enjoyment of remote usage technologies.

III. A Process Must Be Adopted To Determine If Technologies Have Been So Substantially Compromised That They Must Be Removed From Table A

The Commission (as well as, *mea culpa*, certain earlier BPDG and related documents) uses the term "revocation" in asking several questions pertaining to a concept that we understand

as "delisting" or removal of technologies from Table A (herein "withdrawal"). We believe that in this context, "revocation," "renewal," and "withdrawal" connote different, albeit related, concepts.

"Revocation" in regard to content protection technologies generally means the disabling of limited numbers of compromised devices and unlawful clones because particular identifications associated with those devices have been lost or stolen. "Renewal" and "renewability" generally refer to more substantial corrections of more widespread compromise of deployed devices (e.g., by downloading fundamental adjustments to the operation of the protection technology). (Neither revocation or renewability generally impair the operation of unrelated functionalities in the same device.) The capacity and mechanisms for both revocation and renewability are integral features of content protection technologies themselves. We would expect technologies that attain Table A under our proposed (or, indeed any other) criteria will include these features.[7]

Nevertheless, no matter how rigorous the Table A authorization process is and notwithstanding the technical capacity of authorized technologies, there will always be some chance that a protection technology is substantially compromised. A substantial compromise of a Table A technology would have serious and far-ranging deleterious consequences; for example, the flooding into the marketplace of subsequent new devices containing such substantially compromised technologies. New devices would continue to be made and sold that will make unauthorized, indiscriminate redistribution of broadcasts simple, inexpensive, and devastating. Indeed, there is little doubt that in some quarters, the compromised technologies will become marketed *features* of new devices, rather than seen as the threats to content owners

[7] We will consider the implementation of revocation and renewability features as important factors in reviewing proposed technologies under the Commission's Interim Process for Table A.

and the vitality of the free broadcasting system that they are. This result must be avoided if at all possible. A Table A technology is likely to be used not only for broadcast and cable television content, but also for most other forms of high-value content as well. Thus, a substantial compromise would imperil many different distribution channels simultaneously. Given this risk, the Broadcast Flag regulation must include some provision in the event that this worst case comes to pass. That provision is the *withdrawal* of Table A authorization, under carefully considered circumstances.[8]

The process proposed in the criteria attached here allows the Commission to consider every possible means of mitigating the effect of a substantial compromise. Under the standard contained in the Joint Proposal, content owners would first be required to demonstrate that the Table A technology in question has been "substantially compromised in relation to its ability to protect Unscreened Content and Marked Content from unauthorized redistribution (including unauthorized Internet redistribution)." *See* Appendix A § X.23(b)(2). That showing would have to include a description of the steps that could be taken to ameliorate the effect of delisting on consumers and manufacturers. In response, the technology manufacturer would then have an opportunity to demonstrate the efforts that have been taken to repair the technology. Both parties would also be required to address several other factors in their submissions: the protection of Unscreened Content and Marked Content from unauthorized redistribution (including from unauthorized Internet redistribution), and the impact on interested parties for each scenario. If, after carefully weighing this evidence, the Commission finds that the compromise of the technology is substantial, the Commission would need to rescind its authorization as a Table A

[8] "Withdrawal" of Table A authorization is also different from the disqualification of a listed technology as a benchmark for "at least as effective" criterion for Table A. *See* Section X.23(a) of Appendix A. A disqualified technology is not removed from Table A and may continue to be employed in covered Products.

technology. In such a case, the only alternative would be the insecurity of the entire system, undermining the very purpose of the Broadcast Flag regulation.

IV. The Commission Should Require Cable Operators to Encrypt the Digital Basic Tier

The Commission has requested comment on whether "cable operators that retransmit DTV broadcasts may encrypt the digital basic tier in order to convey the presence of the ATSC flag through their conditional access system." We believe that, on a going-forward basis, cable operators should be *required* to encrypt the digital basic tier.

Section 76.630 of the Commission's rules prohibits "scrambl[ing] or encrypt[ing] signals carried on the basic service tier." The Commission has never clarified whether this provision is intended to cover all basic service tiers, including digital basic, or whether it applies only to analog. *See* Report & Order, *Compatibility Between Cable Systems and Consumer Electronics Equipment*, P.P. Docket No. 00-67 ¶ 32 (rel. Sept. 15, 2000). The Commission should take the opportunity of the Broadcast Flag FNPRM to clarify once and for all that Section 76.630 does not apply to the digital basic tier, and that in order to protect retransmitted digital broadcast content, cable operators must in the future encrypt the digital basic tier.

For one thing, encryption of the digital basic tier would permit cable operators to, when the time comes, add 1024-QAM modulation schemes to their systems without the need for another rulemaking. Currently, those retransmitting of digital broadcast content have two options under the rules: they can encrypt the retransmitted content, using whatever modulation scheme they prefer, or they may retransmit in the clear, so long as they use 8-VSB, 16-VSB, 64-QAM, or 256-QAM. Thus, in order to add 1024-QAM modulation, a cable operator will either have to be allowed to encrypt the 1024-QAM signal, or the operator will have to petition the

FCC to add 1024-QAM as a covered modulation scheme. Encryption of the digital basic tier by cable operators, as is already done by satellite operators with no ill effects, will avoid the need for another rulemaking every time cable operators wish to add a new modulation scheme.

Second, cable operators should be able to protect copyrighted content, including content made available on the digital basic tier and through retransmitted broadcasts, from unauthorized reception. *See* NCTA Reply Comments at 4 (filed Feb. 20, 2003). Requiring encryption of the digital basic tier will address the potential security problem caused by digital content being transmitted within the receiving box in the clear. In any event, the Commission should require encryption where it can be accomplished without creating legacy issues; all else being equal, encrypted content is much better protected than unencrypted content.

Third, requiring such encryption may also make cable services more compatible with certain home networking technologies. For example, an encrypted signal can more efficiently trigger 5C protection in a licensed device. In addition, an encrypted, unprocessed signal may be passed to various devices in the home from the receiving device via a Robust Method transfer before the signal is processed. However, this should not be interpreted to mean that Robust Method transfers should be allowed for processed, Marked Content as well.[9]

As the MPAA has previously stated, Section 73.9003(a)(4) was devised for the narrow purpose of accommodating products that only demodulate, but do not engage in Transport Stream Processing, and output an uncompressed, unprocessed signal to a separate product for processing, what is now called a Peripheral TSP Product. Such an uncompressed, unprocessed

[9] *See* NCTA Reply Comments at 5-7; Petition for Reconsideration of the NCTA at 6-10. For reasons that will be explained in more detail in our forthcoming opposition to NCTA's Petition for Reconsideration, permitting the use of Robust Methods generally as a home networking technology would largely eliminate the need for Table A and undermine the entire regulation. The use of Robust Method outputs must therefore be combined to the single, narrow exception that was agreed to in the Broadcast Protection Discussion Group. *See* Final Report of the Co-Chairs of the Broadcast Protection Discussion Subgroup to the Copy Protection Technical Working Group ¶ 5.4 (June 3, 2002).

signal is at less risk of interception and redistribution than content that has undergone Transport Stream Processing. Since the upstream product in such a case does not process the signal, it cannot check for the Flag; there is thus no set of circumstances in which such an upstream device would be outputting anything other than Unscreened Content. There was therefore no reason to create a similar exception for outputs of Marked Content, which would have simply created a vast and unnecessary loophole. Furthermore, home networking is feasible without Robust Method outputs for Marked Content; indeed, the very point of a Table A digital output protection technology is to allow secure home networking from a compliant demodulator. The exception proposed by NCTA would obviate the need for a Table A at all. The Commission should decline to eliminate Table A and should reject NCTA's proposed inclusion of Robust Method outputs for Marked Content.

While the Commission, strictly speaking, only requested comment on whether cable operators should be allowed to "encrypt the digital basic tier in order to convey the presence of the ATSC flag though their conditional access system," the same considerations mentioned above apply equally well to the rest of the digital basic tier. High-value content is made available over cable channels as well, and it would be incongruous to protect digital broadcast television from migration to more secure distribution channels, but fail to protect cable from the same threat. The Commission should therefore require that the entire digital basic tier be encrypted by cable operators.

V. The Broadcast Flag Will Not Unduly Interfere With the Construction of Software Demodulators

The Commission has also requested comment on "the interplay between a flag redistribution control system and the development of open source software applications,

including software demodulators, for digital broadcast television." The Broadcast Flag regulation applies equally to software and hardware demodulators, and there is no justification for any distinction. The regulation adopted by the Commission requires manufacturers of covered demodulators to sell or distribute such demodulators in compliance with the regulation. A "Demodulator" is "a component, or set of components, that is designed to perform the function of 8-VSB, 16-VSB, 64-QAM or 256-QAM demodulation and thereby produce a data stream for the purpose of digital television reception." 47 C.F.R. § 73.9000(g). Any exception to this definition for demodulators with software components would open a huge loophole and severely diminish the effectiveness of the protection scheme established by the regulation. Thus, demodulators with software components, including open source demodulation functions, must comply with the Compliance and Robustness Rules adopted in Subpart M of Part 73.

If open source programmers wish to design a software component of an 8-VSB, 16-VSB, 64-QAM, and 256-QAM demodulator, they have three options: they can choose not to sell or distribute their demodulator in interstate commerce; they can either incorporate their software components into a compliant Demodulation Product, which is robust against attack and has only the outputs and integrated recording methods permitted under the regulation; or they can sell or distribute their software demodulation component to a Bona Fide Reseller for incorporation into a compliant product. There is no evidence that the need to comply with the Broadcast Flag regulation would pose any significant burden on designers of open source software demodulation components. There is no incompatibility between open source and security. Even Linus Torvalds, the founder of the open-source Linux operating system, has asserted that open-source software is fully compatible with secure DRM technology.[10]

[10] *See* John Borland, *Linux Founder Opens Door to DRM*, CNET News.com (Apr. 24, 2003), *available at* http://news.com.com/2100-1016-998292.html.

There is an increasing need in the marketplace for secure equipment and software programs. For example, many consumers are protecting their home computers against intrusions by erecting firewall barriers and establishing encryption on their wireless networks. The Broadcast Flag regulation is simply part of this trend toward tamper-resistent devices. Open-source software programmers have already begun developing secure applications, and will continue to do so in the future. The Broadcast Flag regulation thus represents merely an expansion of these efforts that will help create an entirely new market in protection technologies. We expect open-source software will play an important role in the competition for secure software that is robust against tampering and compliant with the Broadcast Flag regulation.

In any event, open-source software demodulation products already have to comply with a number of the Commission's rules, with no apparent ill effects. For example, open-source demodulation products, like all unintentional radiators, must comply with the Commission's interference rules. *See* 47 C.F.R. §§ 15.5, 15.15(a), 15.109. Those rules place certain requirements on how devices are constructed, with, in the case of television sets, verification by the manufacturer submitted to the Commission. *See id*. § 15.101. The open-source software demodulation product must include a closed-captioning decoder compliant with Section 15.122. If offered for sale or resale to the public, the open source demodulation product must adequately receive all channels. *See id.* § 15.117(b). If used with a screen thirteen inches or wider, the open-source demodulation product must include channel-blocking capability. *See id*. § 15.120. If a software-based demodulator is capable of automatically scanning frequencies other than those used for radio, television, or NOAA weather broadcasts, then it must be "incapable of operating (tuning), or readily being altered by the user to operate," within the bands assigned to cell phones. *Id.* § 15.121(a)(1). The device must also be "designed so that the tuning, control

and filtering circuitry is inaccessible." *Id*. § 15.121(a)(2). If the device contains a transmitter, such that it is a "Software Defined Radio," then the software component must be secure against tampering, *see id.* § 2.932(e), and all changes to the software must be approved by the Commission prior being marketed, *see id*. § 2.1043(b)(3). The Broadcast Flag regulation does not represent a material departure from previous device regulations with respect to its impact on open-source programmers of software demodulators.

The Electronic Frontier Foundation ("EFF") has expressed a concern that the Broadcast Flag regulation would prohibit publication of the source code of the software components of a demodulation product capable of receiving and demodulating ATSC broadcasts. *See* Letter from Fred von Lohmann to Chairman Powell at 2 (Oct. 28, 2003). The EFF claims that the regulation of software in such a manner would be a violation of the First Amendment. Accordingly, the EFF requests that an exception be drawn for Covered Demodulators containing software components.[11]

The EFF's arguments fail for three reasons. First, the EFF's request for an exception for demodulators is based on the erroneous assumption that no "threat of widespread unauthorized Internet redistribution of free, over-the-air ATSC broadcast content" exists, and that therefore no regulation of software demodulators is necessary. *See id*. at 3. The Commission, however, has already found that such a threat "is forthcoming and preemptive action is needed to forestall any potential harm to the viability of over-the-air television." Broadcast Flag Order 4. Given the

[11] Although the EFF states that SDRs "where software . . . perform[s] all the modulation and demodulation necessary to send and receive radio signals . . . already exist," in fact the Software Defined Radio promoted on the GNU Radio website requires several hardware components, including an A/D converter and a cable modem tuner module. *See* GnuRadio: HowtoHdTv, http://comsec.com/wiki?HowtoHdTv. Thus, more accurately, the EFF is requesting an exception for any demodulator that includes a software component.

reality of the threat, the regulation of VSB and QAM demodulators is necessary, whether they have software components or not.

Second, the EFF's First Amendment claim is based on the flawed premise that any regulation of software impermissibly impinges on speech. However, courts have already considered and rejected this argument. *See Universal City Studios, Inc. v. Corley*, 273 F.3d 429, 451 (2d Cir. 2001) ("[The] realities of what code is and what its normal functions are require a First Amendment analysis that treats code as combining nonspeech and speech elements, i.e., functional and expressive elements."). In fact, the Broadcast Flag regulation no more impinges on speech in regulating software demodulators than in regulating hardware demodulators, which after all may have some expressive component that other hardware engineers may appreciate. Such expressive components have never been held to prevent the Commission from regulating broadcast television and radio receivers, nor should such expressive components be held to exempt software demodulators from Commission regulation. Notably, the EFF's argument would apply just as well to the regulation of scanning receivers with software components or to Software-Defined Radios. Such a laissez-faire attitude toward software products would be extremely unwise as more and more functions become capable of being performed in software.

Third, neither the EFF nor any other party has demonstrated how, if at all, the Flag regulation would prohibit the publication of open-source demodulator software. While there has been much speculation on this issue, no one has identified a rule that would require such a result. There is no rule that prohibits schematics of Covered Products from being released, for example, or software source code from being published. The Robustness Rules adopted by the Commission (as well as those in the Joint Proposal) do not require that the code of a software component of a Covered Product not be visible to the end user; they require only that the

Covered Product, including compiled source code and hardware components, not be constructed such that the Compliance Rules provided in the Broadcast Flag regulation can be circumvented. In other words, the Robustness Rules require only that if the object code of a compliant Covered Product is altered, that it either (1) continue to be compliant, or (2) cease functioning.

The regulation also requires that software components that are capable of performing the specified forms of demodulation must be sold or distributed in compliant form or to Bona Fide Resellers that will put the demodulator in a compliant product. Open source programmers thus have at least two options in collaborating on source code: they may share the code among themselves in segments that do not rise to the level of a component or one of a set of components that performs 8-VSB, 16-VSB, 64-QAM, or 256-QAM modulation; or they may transfer the code only to Bona Fide Resellers. No party has introduced any reason to believe that open source programmers cannot meet these requirements. Accordingly, the vague assertions of harm from parties already inalterably opposed to the Broadcast Flag and content protection in general should not prompt the Commission to make any exceptions to the Broadcast Flag regulation.

CONCLUSION

The Commission has undertaken a huge burden in shepherding the digital transition with respect to both broadcast television and conditional access content. The Commission has met that challenge by adopting the Broadcast Flag regulation and by considering in this rulemaking the procedures for approving content protection technologies for DTV receivers taking advantage of those already approved for use with cable Plug & Play devices. Adoption of the proposed regulations attached here will help complete this journey successfully and ensure that

broadcast television is preserved and that high-quality content is made available to consumers in new and exciting ways.

Respectfully submitted,

THE MOTION PICTURE ASSOCIATION OF AMERICA, INC.
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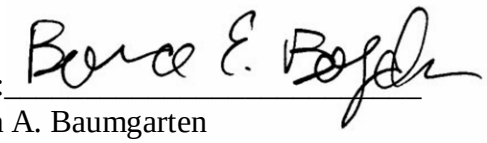
By: 

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APPENDIX A

Revised Proposal for Table A Criteria[1]

X.20 Application for Table A Authorization.

(a) Written application required.

[Anticipates regulations similar to 47 C.F.R. § 2.911.]

(b) Submission of Table A application or information to the Commission.

[Anticipates regulations similar to 47 C.F.R. § 2.913.]

(c) Information to be included in application. An application for Table A authorization shall include:

(1) a demonstration that any one or more of the criteria specified in Section X.21(c)(1) is met;

(2) any Associated Obligations applicable to the technology;

(3) the technology's licensing terms and conditions concerning output and recording controls, including licensing terms and conditions claimed to establish compliance with Sections _____;

(4) a statement whether the applicant is the licensor of the technology. If the applicant is not the licensor of the technology, the application shall:

(A) state that, prior to the filing of the application, the applicant has provided or is providing notice of the filing of the application, together with a copy of the application, to the person or company identified in the application as the licensor; and

(B) list the identity and business address of the licensor and, if applicable, the name of any individual employed by or representing such licensor to whom such notice has been provided;

(5) for the criteria set forth in X.21(c)(1)(A):

(A) the identity of the companies that applicant avers have used or approved a technology as defined in Section X.25;

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[1] As used herein "Table A" means a listing of digital output and recording technologies authorized for use under the Commission's Broadcast Flag regulations. The numbering of sections follows the February , 2003 submission of MPAA *et al.* in response to the initial NPRM in this docket.

(B) evidence of use or approval under Section X.25; and

(C) a detailed description of the technology's recording and or output controls, as applicable, and how such controls prevent unauthorized redistribution Marked Content and Unscreened Content (including redistribution over the Internet);

(6) for the criteria set forth in X.21(c)(1)(B):

(A) the identity of the companies that applicant avers have used or approved a technology as defined in Section X.25;

(B) evidence of use or approval under Section X.25;

(C) the identity of the companies that applicant avers have licensed the technology;

(D) evidence that the technology has been licensed; and

(E) a detailed description of the technology's recording and or output controls, as applicable, and how such controls prevent unauthorized redistribution of Marked Content and Unscreened Content (including redistribution over the Internet);

(7) for the criterion set forth in X.21(c)(1)(C):

(A) evidence that the applicant's technology is at least as effective as a technology currently on Table A,

(B) evidence that the technology is in legitimate use in a Major Commercial Market in connection with the output or recording of a commercially significant amount of New Release Content, if applicable; and

(C) a detailed description of the technology's recording and or output controls, as applicable, and how such controls prevent unauthorized redistribution Marked Content and Unscreened Content (including redistribution over the Internet); and

(8) for the criterion set forth in Section X.21(c)(1)(D):

(A) the licensing terms expressly naming the technology as being permitted to be used for the output or recording of audiovisual content; and

(B) a detailed description of the technology's recording and or output controls, as applicable, and how such controls prevent unauthorized redistribution Marked Content and Unscreened Content (including redistribution over the Internet);

(d) Requests for Identification in Support of Applications.

(1) At least 60 days prior to making an application under this section, any prospective or actual applicant may file a request, on a form prescribed by the Commission, for information concerning whether one or more named Major Studios or Major Television Broadcast roups have "used" or "approved", as "use" and "approval" are defined in Section X.25, the technology proposed to be used by the applicant.

(2) The Commission shall promptly inform each company named in such a request that it has been so named, and request confirmation as to whether it has used or approved the technology, as defined in this subpart. All responses shall be signed as provided in Section X.20(a)__. In light of the interest of Major Studios and Major Television Broadcast Groups in the use of the Broadcast Flag, a failure to respond to the Commission's inquiry within 60 days shall be deemed to be an admission of use or approval of the technology as defined in this subpart.

X.21 Process for Deciding Application.

(a) Notification of pending application.

(1) Applications claiming satisfaction of X.21(c)(1)(A), (B), or (D): Major Studios and Major Television Broadcast Groups shall be notified by the Commission in a timely manner of receipt of an application for Table A authorization. Specific notice of an application under this Section shall be provided to the companies listed pursuant to Section X.20(c)(5)(A). Any company named in an application, as well as any other interested party, shall have 60 days to comment on the facts alleged in the application.

(2) Applications claiming satisfaction of X.21(c)(1)(C): At the initiation of the licensor of the technology or of another company, the Commission shall issue a notice to Major Studios and Major Television Broadcast Groups providing 60 days for comment on the request to include such technology on Table A.

(b) Consideration of application. The Commission shall have the duty and responsibility to process applications for Table A authorizations under this subpart.

(c) Grant of application.

(1) The Commission shall grant an application for Table A authorization if it finds from an examination of the application and supporting data, as well as of relevant comments received thereon within the time periods specified herein, and other matter which it may officially notice, that the application sets forth information sufficient to demonstrate that the technology satisfies at least one of the following criteria:

(A) 3 Major Studios and/or Major Television Broadcast Groups (of which at least 2 must be Major Studios) use or approve the technology.

(B) 10 Major Device Manufacturers (including software vendors) have licensed the technology and 2 Major Studios use or approve the technology.

(C) The technology is at least as effective at protecting Unscreened Content and Marked Content against unauthorized redistribution (including unauthorized Internet redistribution) as is any one of the technologies currently listed on Table A (other than technologies determined to be "significantly compromised" pursuant to Sec. X.23(a)(1)). A determination of whether a technology is "at least as effective" requires consideration of the effectiveness of both the technology and any applicable licensing terms and conditions relating to security (including such technology's compliance and robustness rules necessary to comply with the provisions set forth herein), enforcement, and Change Management.

(x) In connection with such determination, evidence that the technology is in legitimate use in a Major Commercial Market in connection with the output or recording of a commercially significant amount of New Release Content shall weigh in favor of a determination that such technology is "at least as effective" as a technology then on Table A, provided that if such technology has not been so used in connection with a commercially significant amount of New Release Content, such fact shall not be weighed against a finding that such technology meets such "at least as effective" standard.

(y) By way of example and not limitation, a technology shall not be deemed to be in use "in connection with the output or recording of a commercially significant amount of New Release Content" if

(a) such use is solely for internal testing or other evaluation of such technology (including but not limited to testing or evaluation in the form of limited-duration "beta testing")

(b) the company or companies that use such technology demonstrate their intent to use such technology solely outside the United States; or

(c) such use relates solely to the non-commercial distribution of audiovisual content, such as distribution solely to professional devices or for internal distribution within a company (including its Affiliates).

(D) The technology (together with its licensing terms and conditions concerning output and recording controls and Associated Obligations) includes output and recording controls that protect against unauthorized redistribution of audiovisual content (including unauthorized Internet redistribution) and

such technology was expressly named as being permitted to be used for the output or recording (as applicable) of audiovisual content (except where such permission does not extend to use in connection with New Release Content) under the license applicable to a technology listed on Table A (whether such license itself expressly names the technology or references another means by which such technology may be expressly named), either (a) at the time such listed technology was listed on Table A, or (b) at a later date, provided that a Change Management process applied to such subsequent naming of such technology and such subsequent naming complied with such Change Management process.

(2) An entity that is counted to satisfy one of the criteria specified in paragraph (1) cannot be counted more than once in satisfying that criterion.

(3) For purposes of satisfying subparagraph (1)(A) or (B), if an entity is counted as a Major Device Manufacturer, Major Studio, or Major Television Broadcast Group (each, an " ndustry Category"), no Affiliate of such counted entity may be counted in the same or any other Industry Category, except that

(A) if an entity is counted as a Major Device Manufacturer, 1 Affiliate of such counted entity may be counted as either a Major Studio or Major Television Broadcast Group; and

(B) if an entity is counted as a Major Studio or Major Television Broadcast Group, 1 Affiliate of such counted entity may be counted as a Major Device Manufacturer.

(4) A failure to satisfy any of the criteria specified in paragraph (1) shall not preclude an applicant from filing a subsequent application for such technology, or the subsequent addition of the technology to Table A, pursuant to that or any other criterion.

(5) In the event that the licensor of such technology is not the initiator of the request and objects within the applicable notice period to the inclusion of such technology on Table A, then such technology shall not be included on Table A.

(6) In the event that 3 Major Studios and/or Major Television Broadcast Groups object, during the 60-day public notice period, to the inclusion of such technology on Table A on the basis that such technology does not satisfy Section X.21(c)(1)(C), the matter shall be resolved through an expedited review (not to exceed an additional 45 days) to determine whether or not that criterion is satisfied. In the event that there are fewer than 3 Major Studios and/or Major Television Broadcast Groups that so object within the specified period of time (and the licensor of the technology does not object) or if the result of the expedited process is a determination that the technology satisfies Section X.21(c)(1)(C), then the technology will be included on Table A. If the licensor of the technology objects, at any time prior to the conclusion of such process, to the inclusion of its technology

on Table A, then the technology will not be included on Table A. For purposes of this paragraph, if any Major Studio or Major Television Broadcast Group is counted as objecting to the inclusion of such technology on Table A, no Affiliate of such counted entity may also be counted as so objecting.

(7) Grants will be made in writing showing the effective date of the grant and any special condition(s) attaching to the grant. If no objections are received, or in the case of X.21(c)(1)(C) fewer than 3 objections from Major Studios and Major Television Broadcast Groups are received, during the 60-day public notice period relevant time periods for comment or objection specified herein, a grant shall be deemed effective as of the expiration of such period. If any objections (in the case of Sections X.21(c)(1)(A), (B) and (D)) or 3 objections (in the case of Section X.21(c)(1)(C)) are received from Major Studios or Major Television Broadcast Groups during such period, a grant shall be deemed effective as of the date the Commission resolves such objections in favor of the applicant.

(8) No technology shall be admitted to Table A, nor shall any technology authorization be deemed effective, until the application has been granted.

(9) Notwithstanding any other provision of these regulations, because content owners and broadcasters do not have privity with the manufacturers of devices in which the technology will be implemented, in the event that use or triggering of the technology imposes any obligations upon content owners or broadcasters, such technology may only be added to Table A if (a) such obligations have been fully disclosed on the record of the application; (b) that technology may be turned off, bypassed, or otherwise not used and triggered at the content owner's and broadcaster's election, (c) and content owners and broadcasters are provided with facile means of such election.

(d) Dismissal of application.

(1) An application which is not in accordance with the provisions of this subpart may be dismissed.

(2) Any application, upon written request signed by the applicant or his attorney, may be dismissed prior to a determination granting or denying the authorization requested.

(3) If an applicant is requested by the Commission to file additional documents or information and fails to submit the requested material within 60 days, the application may be dismissed.

(e) Denial of application. In the event that the required number of objections are received from Major Studios or Major Television Broadcast Groups during the relevant time periods specified herein and the Commission is unable to make the findings specified in Section X.21(c)(1), it will deny the application. Notification to the applicant will include a statement of the reasons for the denial.

(f) Petition for reconsideration; application for review.

[Anticipates regulation similar to 47 C.F.R. § 2.923.]

X.22 Continuing Obligations of Grantee

[Anticipates regulations similar to 47 C.F.R. §§ 2.929, 2.931, 2.932, 2.936, and 2.938.]

X.23 Disqualification as Benchmark and Withdrawal of Table A Authorization.

(a) Disqualification as benchmark.

(1) A Major Studio or Major Television Broadcast Group may request pursuant to Sec. 1.41 that the Commission disqualify a technology listed on Table A for use as a benchmark in the evaluation conducted under Sec. X.21(c)(1)(C) and X.23(b)(2), on grounds that the technology has been significantly compromised in relation to its ability to protect Unscreened Content and Marked Content from unauthorized redistribution (including unauthorized Internet redistribution). The grantee, and any other interested persons, shall be given 60 days to respond to such a request. The Commission shall disqualify the listed technology as a benchmark if it finds that the technology has been so significantly compromised. Disqualification under this Section X.23(a) does not remove such technology from Table A; such removal may only occur voluntarily, by order of the Commission for exigent circumstances, or pursuant to Section X.23(b).

(2) A grantee or any potential or actual licensee of a listed technology that has been disqualified pursuant to paragraph (1) may request pursuant to Sec. 1.41 that the Commission reinstate such technology for use as a benchmark pursuant to Secs. X.21(c)(1)(C) and X.23(b)(2). The request shall state what actions the grantee has taken to ameliorate the compromised aspects of its technology such that its technology is at least as effective as another technology currently listed on Table A. The party or parties initiating the request pursuant to paragraph (1), and any other person, shall be given 30 days to respond to or comment on such a request. The Commission shall reinstate the listed technology for purposes of Secs. X.21(c)(1)(C) and X.23(b)(2) if it finds that the technology protects Unscreened Content and Marked Content from unauthorized redistribution (including unauthorized Internet redistribution).

(b) Withdrawal of Table A authorization.

(1) The Commission may withdraw any Table A authorization:

(A) for material false statements or representations made either in the application or in materials or response submitted in connection therewith by the applicant, the licensor (if the applicant is not the licensor), the applicant's or licensor's Affiliates, or by any party where the applicant or licensor knows the statement or representation to be false at the time of submission, or in records required to be kept by Sec. X.22__.

(B) if it is determined that changes have been made to the technology other than those authorized pursuant to a process of Change Management or otherwise expressly authorized by the Commission.[2]

(2) A Major Studio or Major Television Broadcast Group may request pursuant to Sec. 1.41 of this chapter that the Commission withdraw the authorization granted to a technology listed on Table A on grounds that the technology has been substantially compromised in relation to its ability to protect Unscreened Content and Marked Content from unauthorized redistribution (including unauthorized Internet redistribution). The grantee, and any other interested persons, shall be given 60 days to respond to such a request. The response may state what actions the grantee has taken to ameliorate the compromised aspects of its technology such that its technology is at least as effective as another technology currently listed on Table A that is not then disqualified for use as a benchmark under Section X.23(a). The Commission shall withdraw the authorization granted to the listed technology if it is determined that the technology has been substantially compromised in relation to its ability to protect Unscreened Content and Marked Content from unauthorized redistribution (including unauthorized Internet redistribution).

(3) In making a determination under paragraph (2), the Commission shall consider the protection of Unscreened Content and Marked Content from unauthorized redistribution (including from unauthorized Internet redistribution), and the impact on content owners, consumers and manufacturers resulting from the continued use of such compromised technology and from any withdrawal of such technology from Table A.

[Anticipates additional regulations providing for a suitable grace period after revocation.]

X.24 Availability of information relating to grants.

(a) Grants of Table A authorization will be publicly announced in a timely manner by the Commission.

(b) Information relating to Table A authorizations, including any materials submitted by the applicant in connection with an authorization application, shall be available in accordance with Secs. 0.441 through 0.470 of this chapter.

X.25 Market Acceptance.

(a) For purposes of a determination pursuant to Sections X.21(c)(1)(A) and (B) (and for no other purpose, e.g., not for purposes of patent law), a company shall be deemed to have "used" or "approved" a technology (a "Proposed Table A Technology") only if

(1) such technology (together with its licensing terms and conditions concerning output and recording controls and Associated Obligations) includes output and

[2] The foregoing subparagraphs are based on 47 C.F.R. § 2.939(a).

recording controls that protect against unauthorized redistribution of audiovisual content (including unauthorized Internet redistribution); and

(2) at least one of the following conditions is true:

(A) such company or, where such company is a Major Studio, any of its Qualified Affiliates, has signed an agreement with the licensor of such Proposed Table A Technology that expressly authorizes (including, for avoidance of doubt, via license grant, non-assertion covenant or other authorization) the company or any of the company's ualified Affiliates (either immediately or upon a specified future date or circumstance) to use or cause the use of such Proposed Table A Technology in a Major Commercial Market, in connection with the output or recording (as applicable) of audiovisual content (except where such authorization does not extend to use in connection with the company's New Release Content), provided that the use of such Proposed Table A Technology was expressly provided for in such agreement at the time the company enters into such agreement (whether such agreement then permits the use of the Proposed Table A Technology or then specifies a future date or circumstance upon which such use of such Proposed Table A Technology shall be permitted), and provided further that such "use" or "approval" shall not be deemed to exist prior to the effective date of any right to use such Proposed Table A Technology under such agreement;

(B) such company or, where such company is a Major Studio, any of its Qualified Affiliates, has entered into a content license or similar content-related agreement that, upon signature (and not pursuant to a Change Management procedure), expressly identifies, either directly, or indirectly by description or reference, such Proposed Table A Technology (i.e., by expressly naming such technology in such content license or content-related agreement or, indirectly, by expressly naming such technology in a specification, standard or license that is directly or indirectly linked by explicit reference through one or more instruments to such content license or content-related agreement) as being permitted to be used for the output or recording (as applicable) of the company's audiovisual content (except where permission does not extend to use in connection with the company's New Release Content)

(C) such company or, where such company is a Major Studio, any of its Qualified Affiliates, has signed an agreement with the licensor of another technology for which the applicable license specifically permits the use (either immediately or upon a specified future date or circumstance) of the Proposed Table A Technology in a Major Commercial Market in connection with the output or recording of audiovisual content (except where such permission does not extend to use in connection with the company's New Release Content), provided that the use of such Proposed Table A Technology was expressly provided for in such agreement at the time the company enters into such agreement (whether such agreement then permits the use of the Proposed Table A Technology or then specifies a future date or circumstance upon which such

use of such Proposed Table A Technology shall be permitted) and provided further that such "use" or "approval" shall not be deemed to exist prior to the effective date of any right to use such Proposed Table A Technology under such agreement;

(D) such company has issued an unambiguous public statement endorsing the Proposed Table A Technology for the output or recording (as applicable) of the company's audiovisual content (except where such endorsement does not extend to use in connection with the company's New Release Content) or the inclusion of the Proposed Table A Technology on Table A; or

(E) a General Counsel or equivalent legal representative of such company has approved in writing the inclusion of the Proposed Table A Technology on Table A.

(b) By way of example and not limitation, a company shall not be deemed to have "used" or "approved" a technology if (A) its use or approval relates solely to internal testing or other evaluation of such technology (including but not limited to testing or evaluation in the form of limited-duration "beta testing") (B) notwithstanding any contractual right to use such technology for New Release Content, the company demonstrates that it uses and intends to use such technology under such contract solely in connection with content other than New Release Content; (C) the company demonstrates its intention to use or approve the use of the technology solely outside the United States; or (D) its use or approval relates solely to the non-commercial distribution of audiovisual content, such as distribution solely to professional devices or for internal distribution within the company (including its Affiliates).

X.26 Authorization for Use With Unscreened Content. In order to be authorized for use with Unscreened Content, an Authorized Digital Output Protection Technology or Authorized Recording Method must, in addition to meeting other applicable criteria, further either:

(a) protect Unscreened Content in a manner that prohibits its digital recording (other than temporary storage solely for the purpose of enabling immediate or delayed display) unless and until the EIT or PMT for content contained in a stream that has not been altered following demodulation is inspected for the Broadcast Flag, in which case:

(1) if the Broadcast Flag is determined to be present, the content shall thenceforth be treated in the same manner as if it had been passed from a Covered Demodulator Product protected by such Authorized Digital Output Protection Technology (pursuant to 73,9004(a)(3) or 73,9006(b)), or recorded using such Authorized Recording Method (pursuant to 73,9004(b)(2)), as Marked Content; and

(2) if the Broadcast Flag is determined not to be present, no protections are thenceforth required to apply; or

(b) protect Unscreened Content so that such content may be accessed in usable form by another product only if such other product protects such content in accordance with the Compliance and Robustness Requirements applicable to Unscreened Content, as if it were a Covered Demodulator Product.

X.27 Definitions.

"Affiliate" means, with respect to any entity, any corporation, partnership or other entity that, directly or indirectly, owns, is owned by, or is under common ownership with, such first entity, for so long as such ownership exists. For purposes of the foregoing, "own," "owned" or "ownership" shall mean holding ownership of, or the right to vote, more than fifty percent (50%) of the voting stock or ownership interest entitled to elect a board of directors or a comparable managing authority.

"Associated Obligations" means any obligations set out on, or proposed to be set out on, Table A for a given Authorized Digital Output Protection Technology or Authorized Recording Method, which pertain to the use of such technology by a Covered Demodulator Product to protect Unscreened Content or Marked Content pursuant to X.3(a)(3), X.4(a)(3) or X.6(b).

"Change Management," for purposes of these criteria, means a process by which content owners are provided a specified right or ability to meaningfully object to particular amendments to content protection agreements.

"Major Television Broadcast roup," for purposes of these criteria, means the 4 largest broadcast networks and the 5 largest television station groups that are not affiliated with Major Studios.

"Major Device Manufacturer," for purposes of these criteria, means any member of CEA, ITI, BSA or CCIA, the total gross revenues of which from device manufacturing and software publishing exceed US$_____ per year.

"Major Studio," for purposes of these criteria, means, during the course of any year, any member of the MPAA or any other company that has generated U.S. box office revenues from theatrical releases of feature films in the immediately prior year that are at least as great as the MPAA member company with the lowest U.S. box office revenues from theatrical releases of feature films for that same year.

"Major Commercial Markets," for purposes of these criteria, means the nited States, any country within the European Community, Canada, Japan and Australia.

"New Release Content," for purposes of these criteria, means, with respect to the application of any Proposed Table A Technology to audiovisual content, audiovisual content owned or acquired by license (with the right to determine distribution methods) by a Major Studio and first commercially released during the 24-month period preceding such application of such technology to such audiovisual content.

“ ualified Affiliate” means, with respect to a Major Studio, (a) an entity that directly or indirectly owns and controls such Major Studio or (b) an Affiliate of a Major Studio authorized to distribute the preponderance of the New Release Content owned or licensed by such Major Studio for one or more of the major content distribution channels (i.e., theatrical, home entertainment, pay-per-view, video-on-demand, pay television, basic cable or broadcast television). For purposes of the foregoing, “own” shall mean holding ownership of, or the right to vote, more than fifty percent (50%) of the voting stock or ownership interest entitled to elect a board of directors or a comparable managing authority.